

An image analysis method designed to identify images in a sequence of images that are statistically different in a pre-selected region of interest. The method is suitable when there is no a priori knowledge of the nature of the interesting images. A reference image is used to identify specific regions of the image that may contain interesting changes (Detect Zone), that will not have interesting changes, but can be used to assess image quality (Veto zone), and an unanalyzed region (Ignore zone). To improve the spatial sensitivity, the Detect and Veto zones can be divided into specific cells. The analysis may also be performed on compressed data and another method automatically classifies a cell as either in the Detect zone or Ignore zone. The sensitivity can be further improved by removing periodic feature variation prior to the statistics calculation.